



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/578,437	05/07/2007	Andrew Clayson	7050392001	6990
7590 05/21/2008				
Sean P. O'Hanlon Bingham McCutchen 3000 K Street, N.W. Suite 300 Washington, DC 20007			EXAMINER ANDERSON, DENISE R	
			ART UNIT 1797	PAPER NUMBER
			MAIL DATE 05/21/2008	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/578,437

**Applicant(s)**

CLAYSON, ANDREW

**Examiner**

Denise R. Anderson

**Art Unit**

1797

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 07 May 2007.  
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-51 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-51 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☒ The drawing(s) filed on 05 May 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☒ Information Disclosure Statement(s) (PTO/5508)  
Paper No(s)/Mail Date 05 May 2006  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_  
5) ☐ Notice of Informal Patent Application  
6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-3 and 44-45 are rejected under 35 U.S.C. 102(b) as being anticipated by Masahiro (JP 10295565, Nov. 10, 1998 – The original document with the figures, the Abstract in English, and a machine translation).

3. In the Abstract and Figure 1, Masahiro discloses a filter apparatus (oil filtering device 1) with a filter (filter 5) and a filter support (filter holding part 3). There is no seal between the filter and the filter support [claims 1 and 44] – which is applicant's "seal through viscous tension" of the liquid being filtered [claim 2]. The Masahiro filter apparatus also has a cup (main body 2) [claims 3 and 45]. In summary, Masahiro anticipates claims 1-3.

4. Claims 1-3 and 44-45 are also rejected under 35 U.S.C. 102(b) as being anticipated by Naoto (JP 8187191, Jul. 23, 1996 – The original document with the figures, the Abstract in English, and a machine translation).

5. In the Abstract and Figure 1, Naoto discloses a filter apparatus (oil strainer for cooking) with a filter (filter paper 7) and a filter support (strainer 1 and frame 2). There is no seal between the filter and the filter support [claims 1 and 44] – which is applicant's

"seal through viscous tension" of the liquid being filtered [claim 2] – since the Abstract discloses, "that a coffee filter paper 7 is put on a strainer 1, the strainer 1 is fitted in a frame 2 attached to the top plate of a stand 3, an oil receiving container 8 is placed just under the strainer 1 inside the legs 4 of stand 3, and oil is flowed in the coffee filter paper 7 to be received by the oil receiving container 8." The Naoto filter apparatus also has a cup (container 8) [claims 3 and 45]. In summary, Naoto anticipates claims 1-3.

6. Claims 4-8, 12, 15-16, 20, 22 and 36-41 and 46-51 are rejected under 35 U.S.C. 102(b) as being anticipated by Masahiro (JP 10295565, Nov. 10, 1998 – The original document with the figures, the Abstract in English, and a machine translation).

7. In the Abstract and Figure 1, Masahiro discloses a filter apparatus (oil filtering device 1) with a filter (filter 5) and a cup (filter holding part 3) [claims 4 and 46] where the filter is inserted in the cup to form a filter body [claims 5 and 6]. In Figure 1, Masahiro further discloses the filter (filter 5) is a sheet [claim 7] of paper [claim 12] and it is inherent that a filter has filtering properties [claim 8]. Masahiro, Translation of Detailed Description, ¶ 2, line 7-9.

8. Regarding claims 15 and 16, Masahiro, in Figure 1, discloses that the cup (filter holding part 3) serves as a filter support [claims 15 and 47] that is rigid and closely fits the filter [claim 16].

9. Regarding claims 20 and 22, Masahiro, in Figure 9, discloses an inlet (pouring oil M into filter 5) in to the filter apparatus and an outlet (oil pouring part 6) from the filter

Art Unit: 1797

apparatus [claim 20] where the inlet is above the filter and the outlet is above the filter [claim 22].

10. Regarding claims 36-38, Masahiro discloses, in Figure 6, that the filter support (filter holding part 3) has an outlet [claim 36], in the form of a plurality of apertures (breakthroughs 3e) [claim 37], and that the filter support also has a plurality of channels (slots 3g) [claim 38].

11. Regarding claims 39-41, Masahiro discloses, in Figure 1, that the filter (filter 5) is removable [claim 39] and that the filter support (filter holding part 3) is removable [claim 40] via a quick release coupling [claim 41] in that the filter support is dropped into place and removed similarly.

12. Regarding claims 48-51, these claims depend on claim 4. Various uses are recited where the filter apparatus is a frying machine-type [claim 51] cooking apparatus [claim 48] on a food retail premises [claim 49] or on a commercial food preparation premises [claim 50]. Since these claims recite no further limitations on the structure of claim 4, these claims are also anticipated by Masahiro.

13. In summary, Masahiro anticipates claims 4-8, 12, 15-16, 20, 22, 36-41 and 46-51.

14. Claims 4-8, 12, 15-16, 20, 22, 36-37, 39-41 and 46-51 are also rejected under 35 U.S.C. 102(b) as being anticipated by Naoto (JP 8187191, Jul. 23, 1996 – The original document with the figures, the Abstract in English, and a machine translation).

15. In the Abstract and Figure 1, Naoto discloses a filter apparatus (oil strainer for cooking) with a filter (filter paper 7) and a cup (strainer 1 and frame 2) [claims 4 and 46] where the filter is inserted in the cup to form a filter body [claims 5 and 6]. In the Abstract, Naoto further discloses the filter (filter paper 7) is a paper sheet [claim 7, 12] and it is inherent that a filter has filtering properties [claim 8].

16. Regarding claims 15 and 16, Naoto, in Figure 1, discloses that the cup (strainer 1 and frame 2) serves as a filter support [claims 15 and 47] that is rigid and closely fits the filter [claim 16].

17. Regarding claims 20 and 22, Naoto, in Figure 9, discloses an inlet (through top cover 10) in to the filter apparatus and an outlet (tap 14) from the filter apparatus [claim 20] where the inlet is above the filter and the outlet is above the filter [claim 22].

18. Regarding claims 36-37, Naoto discloses, in Figures 1-2, that the filter support (strainer 1 and frame 2) has an outlet [claim 36], in the form of a plurality of apertures (Figure 2 strainer holes) [claim 37].

19. Regarding claims 39-40, Naoto discloses, in the Abstract and Figure 1, that the filter (filter paper 7) is removable [claim 39] and that the filter support (strainer 1 and cup 2) is removable [claim 40] via a quick release coupling [claim 41] in that the filter support is slid in and out of place.

20. Regarding claims 48-51, these claims depend on claim 4. Various uses are recited where the filter apparatus is a frying machine [claim 51] cooking apparatus [claim 48] on a food retail premises [claim 49] or on a commercial food preparation

Art Unit: 1797

premise [claim 50]. Since these claims recite no further limitations on the structure of claim 4, these claims are also anticipated by Naoto.

21. In summary, Naoto anticipates claims 4-8, 12, 15-16, 20, 22, 36-37, 39-41 and 46-51.

***Claim Rejections - 35 USC § 103***

22. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

23. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

24. Claims 9-11, 14, 17-18, 23-35, and 42-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Masahiro (JP 10295565, Nov. 10, 1998 – The original document with the figures, the Abstract in English, and a machine translation) as applied to claim 4 above, and further in view of Bitzer et al. (US 4,565,631, Jan. 21, 1986).

25. Claims 9-11, 14, 17-18, 23-35, and 42-43 are also rejected under 35 U.S.C. 103(a) as being unpatentable over Naoto (JP 8187191, Jul. 23, 1996 – The original document with the figures, the Abstract in English, and a machine translation) as applied to claim 4 above, and further in view of Bitzer et al. (US 4,565,631, Jan. 21, 1986).
26. Masahiro (or Naoto) discloses the claimed invention except for the inline filter and support being various shapes. These shapes are known in the inline filter art. Bitzer et al. (US 4,565,631, Jan. 21, 1986) discloses all the claimed inline filter forms in Figures 1-19 in the shape of "baskets" with "jackets that could be either cylindrical or frustoconical" and that "several such baskets may be coaxially nested and centered on the conduit axis." Bitzer et al., Column 2, lines 49-62. Bitzer further teaches that only the basket bottoms need be perforated, but if the sides (jackets) are also perforated, this "increases the effective sieve surface and reduces the flow resistance of the filter." Bitzer et al., Column 7, lines 63-67. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have included the inline filter forms in the Masahiro (or Naoto) filter apparatus as taught by Bitzer et al., since Bitzer et al. states at Column 7, lines 63-67 that such a modification would increase the effective filter surface and reduce the filter's flow resistance.
27. Regarding claim 35, Masahiro (or Naoto) discloses the claimed invention except for the inline filter and support being on its side rather than top to bottom as it is in the gravity-fed filter apparatus of Masahiro (or Naoto). Bitzer et al. teaches that the inline



filter and support can be on its side since the Bitzer et al. in line filters can be "for a conduit system" and, thus, can be pressure-fed, as opposed to gravity-fed.

28. Regarding claims 42 and 43, Masahiro (or Naoto) discloses the claimed invention except for the inlet being a quick-release rotary coupling and the outlet being a quick-release rotary coupling. Bitzer et al. teaches inline filters "for a conduit system serving for the circulation of liquid" and further teaches valves and pipes to connect the filter apparatus into the conduit of the recirculation system. Bitzer et al., Column 1, lines 11-14; Figures 1, 3, 6-8, and 12-19. It would have been obvious to one of ordinary skill in the art to have connected the Masahiro (or Naoto) filter apparatus into a recirculation conduit, with pipes and valves, as taught by Bitzer et al., in order to filter the cooking oil before returning it to use with less exposure of personnel to hot oil.

29. Furthermore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have, in the Masahiro (or Naoto) filter apparatus in a recirculation conduit, substituted the valves, taught by Bitzer et al., with quick release rotary couplings at the inlet and outlet in order to quickly pull the filter apparatus out of service for maintenance or repair. To recap, Masahiro (or Naoto), in view of Bitzer, discloses or suggests all limitations recited in claims 42-43.

30. In summary, Masahiro (or Naoto), in view of Bitzer et al., discloses or suggests all limitations recited in claims 9-11, 14, 17-18, 23-35 and 42-43.

31. Claims 13 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Masahiro (JP 10295565, Nov. 10, 1998 – The original document with the figures,

Art Unit: 1797

the Abstract in English, and a machine translation) as applied to claim 4 above, and further in view of Kyle (US 4,604,203, Aug 5, 1986).

32. Claims 13 and 19 are also rejected under 35 U.S.C. 103(a) as being unpatentable over Naoto (JP 8187191, Jul. 23, 1996 – The original document with the figures, the Abstract in English, and a machine translation) as applied to claim 4 above, and further in view of Kyle (US 4,604,203, Aug 5, 1986).

33. Masahiro (or Naoto) discloses the claimed invention except for the polyester filter. Kyle teaches that it is known to make “the support layer web and the filter layer web” of a “cooking oil filtering apparatus” from “polyethylene terephthalate” which is applicant’s recited polyester filter means in a filter apparatus. Kyle, Column 3, lines 25-

33. In this same passage, Kyle further teaches that a polyester filter would be “unaffected by hot cooking oil” and would be FDA approved for direct contact with food. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have made the Masahiro (or Naoto) filter apparatus with a polyester filtering means as taught by Kyle, since Kyle states at Column 3, lines 25-33, that such a modification would make the filter means “unaffected by hot cooking oil” and would be FDA approved for direct contact with food.

34. In summary, Masahiro (or Naoto), in view of Kyle, discloses or suggests all limitations recited in claims 13 and 19.

Art Unit: 1797

35. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Masahiro (JP 10295565, Nov. 10, 1998 – The original document with the figures, the Abstract in English, and a machine translation) as applied to claim 4 above.
36. Claim 21 is also rejected under 35 U.S.C. 103(a) as being unpatentable over Naoto (JP 8187191, Jul. 23, 1996 – The original document with the figures, the Abstract in English, and a machine translation) as applied to claim 4 above.
37. Both Masahiro and Naoto disclose an inlet and an outlet [claim 20] above the filter [claim 22]. Neither discloses an inlet above the filter and an outlet below the filter [claim 21]. It would have been obvious to one of ordinary skill in the art that placing the outlet below the filter in the Masahiro (or Naoto) filter apparatus would have been an obvious solution to try, given that there are a finite number of identified, predictable solutions (the outlet is above the filter or the outlet is below the filter).
38. In summary, Masahiro (or Naoto) discloses or suggests all claim 21 limitations.

### ***Conclusion***

39. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Masahiro (or Naoto) discloses the claimed invention except for the inline filter being various shapes recited by applicant. While Bitzer et al. (disclosed the claimed filter forms in one reference, other references some of the recited filter forms and are listed here:

US 2247040 A	06/24/1941	210/238	HENRY WHITSETT
US 2865511 A	12/23/1958	210/416.1	HOPKINS JR WILLIAM L
US 4806243 A	02/21/1989	210/303	Jackson; Philip
US 5092999 A	03/03/1992	210/321.72	Valenzuela; Gabriel et al.

US 5897787 A      04/27/1999   210/767      Keller; Timothy Robert

- a. Whitsett (US 2,247,040, Jun. 22, 1939) discloses a hot oil strainer in Figures 1-3 with two conical strainers, one on top of the other, to "provide a larger area of straining surface that would a flat strainer and permitting them to be so nested as to require a minimum of accommodating space thereof." Whitsett, Title, Page 2, Column 1, lines 30-35. Here, a single conical inline filter form has two concentric annuluses where the inner annulus radius is zero.
- b. Hopkins (US 2,865,511, Dec. 28, 1955) was already discussed above. There it was shown that Hopkins discloses a "filter apparatus which is particularly useful in the purifying of fluids, especially hot liquids" in Figures 1-3. Hopkins, Column 1, lines 15-17. Such inline filters provide "several filtering surfaces [that] are active." Hopkins, Column 3, lines 21-24.
- c. Jackson (US 4,806,243, Feb. 21, 1989) discloses the claimed inline filter forms in Figures 1-3 that "minimize the overall length of the filter . . . whilst providing an acceptable ratio between the filter surface area provided and the cross-section of the conduit." Column 2, lines 36-48.
- d. Valenzuela et al. (US 5,092,999, Mar. 3, 1992) discloses the claimed inline filter forms in Figures 3 and 4a "to provide a filtering membrane structure that provides . . . more surface area than exiting filter membranes of like diameter for filtering the fluid flow more efficiently per unit time." Valenzuela et al., Column 2, lines 11-19.

Art Unit: 1797

- e. Keller (US 5,897,787, Apr. 27, 1999) discloses the claimed inline filter forms in the one drawing and states, "Further, the conical shaped portion of the basket 24 provides a relatively larger surface area for capturing the particles in the fluid as the latter flows through the basket."

40. Other prior art made of record and not relied upon is considered pertinent to applicant's disclosure. These references were geared more to disclosing the limitations of applicant's cooking oil apparatus and less towards the shape of the inline filter.

US 2733815 A	02/07/1956	210/316	Kwochka et al.
US 2902161 A	09/01/1959	210/416.5	HUMBERT JR KINGSLEY E et al.
US 3849312 A	11/19/1974	210/237	Wecker, Sr.; Walter A.
US 4604203 A	08/05/1986	210/489	Kyle; Robert C.
US 5228985 A	07/20/1993	210/167.28	Wells; John et al.
US 7137419 B1	11/21/2006	141/340	Reeves; Dylan

41. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Denise R. Anderson whose telephone number is (571)270-3166. The examiner can normally be reached on Monday through Thursday, from 8:00 am to 6:00 pm.

42. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Walter D. Griffin can be reached on 571-272-1447. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

43. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should

Art Unit: 1797

you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/David R. Sample/  
Supervisory Patent Examiner,  
Art Unit 1797

DRA